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WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
C12N 15/12, 1/21, C07K 14/705, A61K 38/17

A1

(11) International Publication Number: WO 98/39433

(43) International Publicati n Date: 11 September 1998 (11.09.98)

(21) International Application Number: PCT/GB98/00727

(22) International Filing Date: 5 March 1998 (05.03.98)

(30) Priority Data:
9704519.9 5 March 1997 (05.03.97) GB

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(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: COMPLEMENT RECEPTOR TYPE 1 (CR1)-LIKE SEQUENCES

(57) Abstract

Replacement of codons in DNA encoding the first three SCRs of LHR-A of CR1 with others encoding the predicted amino acids in the CR1-like sequence can give rise to chimeric genes which can be expressed to give active complement inhibitors with functional complement inhibitory, including anti-haemolytic, activity. There is provided a soluble polypeptide comprising, in sequence, one to four short consensus repeats (SCR) selected from SCR 1, 2, 3 and 4 of long homologous repeat A (LHR-A) as the only structurally and functionally intact SCR domains of CR1 and including at least SCR3, in which one or more of the native amino acids are substituted with the following: Val 4, Asp 19, Ser 53, Lys 57, Ala 74, Asp 79, Arg 84, Pro 91, Asn 109, Lys 116, Val 119, Ala 132, Thr 137, Ile 139, Ser 140, Tyr 143, His 153, Leu 156, Arg 159, Lys 161, Lys 177, Gly 230, Ser 235, His 236.